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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,770	11/22/2000	R. Terry Dunlay	97, 022-F3	5398

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EXAMINER

SMITH, CAROLYN L

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/718,770

Applicant(s)

DUNLAY ET AL. 3

Examiner

Carolyn L. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2005 and 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 032505.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Applicant's amendments and remarks, filed 6/23/05 and 3/25/05, are acknowledged.

Amended claims 13 and 17-23 (in response filed 3/25/05) are acknowledged.

Applicant's arguments, filed 6/23/05 and 3/25/05, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from the previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The information disclosure statement filed 3/25/05 fails to comply with the provisions of 37 CFR 1.97, 1.98, and MPEP § 609, because references 68-69, 71-72, 77, 87, 98, and 109 lack publication dates. They have been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609, ¶ C(1). The other references in the IDS, filed 3/25/05, have been considered by the Examiner.

Claims 13-25 are herein under examination.

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***Claim Objections***

Claim 13 is objected to because of the following informality: The phrase “a desired arrays of wells” is awkward as it contains the singular word “a” with multiple words in plural form. Appropriate correction is required.

**NEW MATTER**

Claims 24-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Several limitations in instant claims 24 and 25 do not appear to have written support in the specification, claims, and/or drawings as originally filed: “perimeter”, “height”, “width”, “ratio of fluorescent intensities”, “difference in fluorescent intensities”, and “number”. On page 12, line 4, written support is provided for “perimeter squared area”, but not for “perimeter” which is broader in scope. On page 12, line 6, written support is provided for “height width ratio”, but not for individual concepts of “height” and “width” which are broader in scope. On page 12, lines 14-15, written support is provided for “the ratio of the average fluorescent intensity of the cytoplasmic mask to the average fluorescent intensity within the cell nucleus for colors 2-4”, but not for “ratio of fluorescent intensities” which is broader in scope. On page 12, lines 16-17, written support is provided for “the difference of the average fluorescent intensity of

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the cytoplasmic mask and the average fluorescent intensity within the cell nucleus for colors 2-4", but not for "differences in fluorescent intensities" which is broader in scope. On page 9, line 14, written support is provided for "number of cells", but not for "number" which is broader in scope. Because the introduction of these limitations do not appear to have written support in the specification, claims, and/or drawings as originally filed, they are considered to be NEW MATTER.

For the "ratio of fluorescent intensities" limitation, Applicants state that pages 11-12 are exemplary. Applicants cite several passages on pages 12 and 19, but these passages fail to mention ratios.

### **PRIOR ART**

A new prior art rejection is provided that takes into account the proper priority date of the instant invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 13-25 are rejected under 35 U.S.C. 102(e)(2) as being anticipated by Nova et al. (P/N 5,961,923).

Nova et al. disclose a method involving cell sorting assays, storage of matrices with memories on machine-readable media, and retrieving stored information (abstract) as recited in the preamble of instant claim 13. Nova et al. disclose the use of high throughput screening on microplate formats to screen a number of drug compounds and cell-based assays (col. 6, lines 7-19) which represents providing a microplate comprising cells and treating with a test compound, (as stated in instant claims 13, 15, and 16) wherein the matrices which are microplates containing 96, 384, or higher format wells (col. 8, lines 30-33) as stated in step a) of instant claim 13. Nova et al. disclose computer systems and methods for recording, reading, or retrieving information in the data storage devices (col. 15 lines 60-67) which represent the computer system of instant claim 13. Nova et al. disclose maintaining a database that includes all patient information for the sample as well as other aspects of the patient's file (col. 83, lines 9-20) which represents the computer system database, as stated in instant claim 13. Nova et al. disclose using memory devices that include the input/output of stored information for higher density memories (col. 13, lines 49-56) and software allowing the user to specify what chemical blocks are to be used, the number of steps, and pharmacophore names (col. 87, lines 39-51) as well as using user-entered compound names stored in a database (col. 88, lines 17-20) which represent storing input parameters used for screening in a database, as stated in step b) of instant claim 13 as well as software having instructions causing a computer to execute a method, as stated in instant claim 14. Nova et al. disclose individual particles can be identified by reserving certain memory locations for identification only, individual identification (col. 73, lines 1-11), as well as software

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providing archival capability for a 96-well format where individual wells can be selected (col. 88, lines 48-54) which represents selecting an individual well on the plate and storing information, as stated in step c)i) of instant claim 13. Nova et al. disclose software reading one tag and encoded information including graphical displays, reports including progress (calculations) (col. 88, lines 16-34), searching for specific compounds with certain building blocks (feature data) including those already archived by displaying structure, archive location, microplate group name, number and well (col. 88, lines 55-62) which represents collecting, calculating, storing, and retrieving image data, cell feature data, well summary data, plate summary data in a database, as stated in steps i) through ix) of instant claim 13 as well as instant claims 17, 19, 21-22. Nova et al. disclose optical memory devices (OMD) and image acquisition from a camera that can be displayed to the system monitor including edges and peak signals as well as determining the average intensity of each cell (col. 51, line 61 to col. 52, line 9 and lines 27-60) which represents collecting image, intensity analysis, and feature data of cells, as stated in instant claims 13 and 23-25. Nova et al. disclose repeating the steps for handling, writing, reading, and distributing the optical memory devices to the next process step (col. 54, lines 5-11) which represents the repeating steps in step c) of instant claim 13. Nova et al. disclose other repeating screening protocols (col. 118, lines 35-36 and 54-57 and col. 128, lines 39-49). Nova et al. disclose recording devices including a photodetector to detect the occurrence of fluorescence or other optical emission and permitting data storage (col. 10, lines 6-23) which represents a computer system database that includes photographic image data, as stated in instant claims 18 and 20.

Thus, Nova et al. anticipate the instant invention.

***Conclusion***

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tina Plunkett whose telephone number is (571) 272-0549.

*Ardin H. Marschel* 8/30/05  
**ARDIN H. MARSCHEL**  
**SUPERVISORY PATENT EXAMINER**

August 30, 2005